



# Something close by

Locally produced chip seals carry long list of benefits

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**M**any roads are located in areas of the world where high-quality construction aggregates are scarce.

Therefore, when high-quality aggregates are needed for pavement-preservation activities they must be transported to these locations. This transportation increases the cost of pavement construction and preservation. Increased costs often mean timely pavement preservation activities are postponed. This postponement leads to deterioration of the infrastructure and, ultimately, increased costs. However, many pavements requiring preservation are low-volume facilities. These low-volume roads may not require the high-quality aggregates necessary on higher-traffic-volume facilities. Therefore, if more economical local aggregates could be demonstrated to perform acceptably, pavement preservation could be accomplished within budget at appropriate

intervals. This would save costs in both the short and long term.

Chip seals are used almost everywhere in the world for road construction and extending pavement life. Most chip seals are placed on low- to medium-traffic-volume roads. Although high-quality crushed aggregates offer the best chance for success in chip seals on any roadway, they may be overkill on low-volume roads. So, if acceptable chip-seal performance on low-volume roads could be demonstrated utilizing locally available and minimally processed aggregates, costs would be reduced and resources would be better utilized. Therefore, an experiment was designed to demonstrate the performance of chip seals constructed using two different aggregates on two low-volume state highways. One aggregate was a material routinely, and successfully, used for chip-seal construction in this area of the state. The second aggregate was a material that did not meet specifications for gradation or fracture but was locally available and less costly.